

The opinion in support of the decision being entered today was not written
for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte WILLIAM KENNEFICK, LAUREL ROGERS
and
CHRISTOPHER MCDOWELL

Appeal No. 2003-2036
Application No. 09/961,198

HEARD: February 5, 2004

Before McQUADE, NASE, and BAHR, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 2 and
4 to 9, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to an apparatus and method for applying surgical fasteners, and in one particular aspect to such an apparatus and method for driving rivets to secure cranial plates (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Torrie et al. (Torrie)	5,667,513	Sept. 16, 1997
DiPoto et al. (DiPoto)	5,957,953	Sept. 28, 1999

Claims 1,2 and 4 to 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Torrie in view of DiPoto.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the final rejection (Paper No. 9, mailed October 16, 2002) and the answer (Paper No. 12, mailed May 5, 2003) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 11, filed April 1, 2003) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1, 2 and 4 to 9 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claims 1 and 5, the independent claims on appeal, read as follows:

1. An instrument for applying a surgical fastener, the instrument comprising:
an elongated body having proximal and distal ends;
a piston axially moveable within a bore within the body, the piston having a distal end adjacent the body distal end; and
a slit through the body to the bore, the slit extending a distance axially from the body distal end, the slit has a distal end at the body distal end, and an opposite proximal end, the proximal end of the slit opening into an aperture wider than the slit whereby to reduce stress on the body at the slit proximal end;
wherein the bore at the body distal end is sized to snugly receive a portion of the fastener therein, the slit allowing the body to compressively hold said portion of the fastener.
5. A method of holding a surgical fastener within an instrument for applying said fastener, the method comprising the steps of:
providing an instrument comprising an elongated body having proximal and distal ends, a piston axially moveable within a bore within the body, the piston having a distal end adjacent the body distal end, and a slit through the body to the bore, the slit extending a distance axially from the body distal end, the slit has a distal end at the body distal end, and an opposite proximal end, the proximal end of the slit opening into an aperture wider than the slit whereby to reduce stress on the body at the slit proximal end; and,
pushing a portion of the fastener into the bore at the body distal end, the body contracting about portion of the plug to hold the plug within the body.

Torrie's invention relates to orthopedic surgical instruments and more particularly a soft tissue anchor delivery apparatus for inserting a soft tissue anchor into a patient's joint tissue (for example, glenoid) to effect a soft tissue repair. As shown in Figure 1, the preferred embodiment of Torrie's soft tissue anchor delivery apparatus includes a gripping device 18 having fingers 23-26 at the distal end and configured such that they can hold a soft tissue anchor 63 about the head portion of the anchor. An actuating

tube 11 slides over the gripper and the fingers, thus holding the fingers and the contained soft tissue anchor within the bore of the actuating tube. A pushrod 38 is placed within the bore 33 of the gripper. The pushrod has a countersunk head that is shaped such that it is a close fit for the head of the soft tissue anchor. The pushrod is connected to a tube having a bore so that the actuating pin of the soft tissue anchor can be pushed down into the head of the anchor. The pushrod is spring loaded so as to allow the pushrod to be driven distally upon retraction of the actuating tube, thus driving the anchor free of the deployed fingers and hence of the entire delivery system.

DiPoto's invention relates to suture anchors. Suture anchors are used to mount suture to bone for subsequent attachment of ligaments, tendons, or other tissue. Some suture anchors are inserted into a pre-drilled hole in the bone, while others are "self-tapping" and are threaded into the bone through the bone surface. In either case, ridges which extend outwardly from the exterior surface of the suture anchor help retain the anchor in the bone tissue (in self-tapping anchors, the ridges are often the external threads). Figures 9-9B illustrate a variably expandable, two piece suture anchor 200 which includes an expandable outer anchoring member 202 and an inner member 204 which is threaded into outer member 202 to adjustably expand outer member 202. Outer member 202 includes a tubular body 212 with an interior, threaded bore 214 which is engaged by threaded inner member section 208. A pair of arms 216 extend

axially and proximally from body 212 to the proximal end of outer member 202. Arms 216 are circumferentially spaced around the periphery of outer member 202 by a pair of keyhole-shaped slots 218 which are separated by 180 degrees. Each slot 218 has a relatively narrow neck 219 that extends axially from the proximal end of outer member and terminates in an enlarged aperture 220 adjacent to the junction between body 212 and arms 216. DiPoto teaches (column 9, lines 38-40) that "[e]nlarged apertures 220 help ensure that arms 216 are sufficiently flexible at body 212 to expand radially." In use, with outer and inner members 202, 204 assembled as shown in Figure 9B, suture anchor 200 is inserted into a bone hole. Inner member 204 is then threaded into outer member 202 so that conical head 208 engages arms 216 and urges arms 216 to expand radially outwardly into the bone. The enlarged apertures 220 of slots 218 both facilitate the expansion of arms 216 and help ensure that arms 216 flex at the locations of apertures 218 rather than more proximally.

In the rejection under 35 U.S.C. § 103 before us in this appeal (final rejection, pp. 2-3), the examiner (1) ascertained¹ that Torrie disclosed the claimed invention "except for the slit having a wider opening at a proximal end^[2];" and (2) determined that

¹ After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

² Independent claims 1 and 5 recite that "the proximal end of the slit opening into an aperture wider than the slit whereby to reduce stress on the body at the slit proximal end."

it would have been obvious to one skilled in the art at the time the invention was made to construct the instrument of Torrie with the slit having a wider opening at a proximal end in view of DiPoto in order to facilitate and ensure that the arms of the body are sufficiently flexible to expand radially.

The appellants argue (brief, pp. 4-5) that the applied prior art does not suggest the claimed subject matter. We agree. All the claims under appeal require the instrument for applying a surgical fastener to include a slit through an elongated body wherein the proximal end of the slit opens into an aperture wider than the slit to reduce stress on the body at the slit proximal end. However, these limitations are not suggested by the applied prior art. In that regard, while DiPoto does teach an expandable suture anchor (i.e., a surgical fastener) having an outer member in which a slit extends through its body wherein the distal end of the slit opens into an aperture wider than the slit, DiPoto does not teach or suggest providing an instrument for applying a surgical fastener to include a slit through an elongated body wherein the proximal end of the slit opens into an aperture wider than the slit to reduce stress on the body at the slit proximal end.

In our view, the only suggestion for modifying Torrie in the manner proposed by the examiner to meet the above-noted limitations stems from hindsight knowledge

derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

For the reasons set forth above, the decision of the examiner to reject claims 1, 2 and 4 to 9 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2 and 4 to 9 under 35 U.S.C. § 103 is reversed.

REVERSED

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

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Appeal No. 2003-2036
Application No. 09/961,198

Page 10

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Appeal No. 2003-2036
Application No. 09/961,198

Page 11

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